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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

WILLIAMS, ROSS A

ART UNIT PAPER NUMBER

3713

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/025,310

Applicant(s)

MATHOG, DAVID ROSS

Examiner

Ross A. Williams

Art Unit

3713

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 05 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 37-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 37-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 47 recites the limitation "the minimum hold time". There is insufficient antecedent basis for this limitation in the claim.

Claim 48 recites the limitation "the order of transitions". There is insufficient antecedent basis for this limitation in the claim.

Claim 49 recites the limitation "the rate of transitions". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 37, 38, 44 – 50 and 52 are rejected under 35 U.S.C. 102(b) as being anticipated by Elstein et al. (US 4,702,475).

Regarding claim 37, Elstein et al discloses a sports training system, wherein the device consists of: a case 126, a plurality of lamps that are connected to the surface of the case wherein the lamps 112, 114, 116, 118, 120

and 122, light up thereby issuing a signal to the athlete (9:23 – 35). Each lamp lights up, thereby emitting a signal in an ON state and does not emit a signal while in the OFF state. The system also utilizes a microprocessor to control the operation of the system (11:27 – 29). One way the system can be used to train an athlete is by sequentially causing the lamps to emit signals (9:30 – 35) or can introduce a sequence of unpredictable signals (11:56 – 69). Thus, introducing variation into the system to better train athletes.

Regarding claim 38, as can be seen in Figs 1, 3, 4 and 6, the device is used in the playing of athletic activities. Thus, the device is made out of durable materials appropriate for athletic activities.

Regarding claim 44, Elstein et al. discloses a controller in the form of a microprocessor (11:27 – 29).

Regarding claim 45, Elstein et al. discloses signals that represent device states emitting from lamps. Elstein et al. further discloses that these signals emitted from the lamps can be combinations of lamp signals that also represent device states to indicate different actions the user or athlete must take. Elstein et al. discloses that these signals can be emitted in a random manner (9:56 – 68).

Regarding claims 46, 47 and 50, Elstein et al. discloses that the device can utilize memory cartridges with pre-stored drill routines. The pre-stored drill routines have various routines wherein the routine have various light patterns, different individual time periods of response for each light as well as different pause duration periods. The pause duration periods are periods at the end of the response period and the beginning of the next individual response period. (4:34 –

51). It is further disclosed that the device has a keypad or dial wherein the user can input or adjust different time periods of response (4:63 – 5:11).

Regarding claim 48, Elstein et al. discloses that a cyclic switch can selectively as well as sequentially energize the lamps thereby creating sequential device states for the athlete (9:30 – 39). It is also disclosed that one of the objects of Elstein et al's invention is to emit signal by means of the lamps in a random pattern for the athlete (Abstract).

Regarding claim 49, as discussed above Elstein et al. discloses that a keypad can be used to input the transition frequencies of the periods of response times (4:68 – 5:11). Elstein et al. also discloses that the cyclic switch can select device states in a sequential manner as well as a selective manner (9:36 – 39). It is disclosed that one of the objects of Elstein et al's invention is to emit signal by means of the lamps in a random pattern for the athlete (Abstract). Thus in order for the invention to operate in a random manner then the device would then be operating in a selective manner as well.

Regarding claim 52, Elstein et al. discloses a controlling means to control the transitions of device states (11:27 – 29), a setting means of switches and dials to set the parameters in regards to order and timings of the transitions between device states, wherein the parameters are read in by the control means (11:49 – 59), a signaling means controlled by the control means (11:15 – 26), wherein this signaling means allows the user to distinguish between device states (9:56 – 69), and wherein the signals are presented in random unpredictable manner (Abstract).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 39, 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Elstein et al. as applied to claim 37 above, and in view of Chein (US 5,469,342).

Regarding claims 39 and 40, Elstein et al discloses the shape of the case of the signaling device as well as the positioning of the lights, as shown in Figures 1, 3, and 4. Elstein does not disclose that the shape of the case is conical, or that the signal emitting elements are disposed in rings upon the outer surface of the case. Chein discloses a light signaling apparatus wherein the signaling elements are disposed in rings on the surface of the case and also wherein the case is conical in shape (Chein Fig 5).

One of ordinary skill in art would be motivated to modify Elstein et al in view of Chein to provide a light signaling means wherein the lights are in the shape of rings upon the surface of a conical shaped case. The usage of alternatives housings and displays would be obvious to a skilled artisan who would be motivated by the wants, needs, and desires for their system defined by the specification of usage. The change in structure would not serve to alter the

performance of the device and thus would be obvious. The motivation for having the signaling elements disposed upon the surface of the case in rings would be to provide the athlete with a clear view of the signal. A ring of lights would provide a view of the signal from all angles (360 degrees) regardless of where the athlete is standing.

Claims 41 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elstein et al (US 4,702,475) as applied to claim 37, and in view of Karrenberg (US 4,949,320).

Regarding claim 41, Elstein et al. does not disclose the first and second signal lights being of different colors. Karrenberg discloses a signaling device used for sports training in particular interval training, wherein the device comprises sets of differently colored LEDs (Karrenberg 4:11 – 16). As shown in Karrenberg different colored lights can be used to let the athlete know what clock interval is presently running (Karrenberg 4:11 – 16).

It would be obvious to one of ordinary skill in the art to modify Elstein et al. in view of Karrenberg to provide signaling lights of different colors. Different colors of lights will let the athlete easily discern what clock interval they are presently in or what action they must take.

Regarding claim 43, Elstein et al discloses a training device wherein multiple signals are emitted for the athlete to respond to. Elstein discloses that is powered by a power supply, is connectable to any convenient source of electricity through a line plug (Elstein et al 9:29 – 31). Elstein does not explicitly

disclose that a removable battery powers the device. Karrenberg discloses a sports-training timer device wherein the power source is a battery (Karrenberg 4:44 – 65).

It would be obvious to one of ordinary skill in the art to modify Elstein et al. in view of Karrenberg to provide a removable battery so that the device may be powered. A removable battery is indeed a convenient power source. The motivation for using a removable battery would be to make the device more portable in that it can be used in a variety of different location that may not have a permanent electricity source.

Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Elstein et al (US 4,702,475) as applied to claim 37, and in view of Boland (US 5,921,896).

Regarding claim 42, Elstein et al. discloses the training device as discussed above referring to claim 37. Elstein et al. does not disclose LED's that are activated to signal the device states. Boland discloses a sport-training device that signals an athlete by means of LED's to different device states (Boland 5:63 – 6:2). The purpose of LED's in Boland are to signal an athlete as to a device state where they must react in an appropriate manner thereby improving reaction times and skill in that particular sport.

It would be obvious to one of ordinary skill in the art to modify Elstein et al. in view of Boland to incorporate LED's as the signaling means for an athlete.

LED's are known to provide an economical means of light while still providing a maximum amount of light.

Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Elstein et al (US 4,702,475).

Regarding claim 51, Elstein et al discloses a sports-training device wherein the device emits signals to the athlete. Elstein et al discloses two embodiments wherein one embodiment has 3 lamps representing device states (Elstein Fig 1) and another embodiment wherein there are 6 lamps representing device states (Elstein Figs 3 and 4). It is also discloses that combinations of these lamps can indicate other states as well (Elstein 9:56 – 68).

It would be obvious in view of Elstein to provide 4 states that represent multiple device state, wherein the device states represent different actions the user must take. It would be an obvious modification to one of ordinary skill in the art to specify four device states instead of 3 or more devices states as Elstein et al shows his device to be fully capable of signaling.

Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Elstein et al (US 4,702,475) in view of Boland (US 5,921,896) and further in view of Karrenberg (US 4,949,320).

Regarding claim 53, Elstein et al. discloses the training device as discussed above referring to claim 52. Elstein et al. does not disclose a set of red and blue LED's that are activated to signal the device states. Boland

discloses a sport-training device that signals an athlete by means of LED's to different device states (Boland 5:63 – 6:2). The purpose of LED's in Boland's disclosure are to signal an athlete as to a device state where they must react in an appropriate manner thereby improving reaction times and skill in that particular sport. Karrenberg discloses a signaling device used for sports training, particularly interval training, wherein the device comprises sets of differently colored LEDS (Karrenberg 4:11 – 16).

It would be obvious to one of ordinary skill in the art to modify Elstein et al. in view of Boland and in further view of Karrenberg to incorporate LED's as the signaling means for an athlete. LED's are known to provide an economical means of light while still providing a maximum amount of light. It would also be obvious to modify the colors of the LED's or lamps to include the colors red and blue. As shown in Karrenberg different colored lights can be used to let the athlete know what clock interval is presently running (Karrenberg 4:11 – 16).

Citation Of Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 4,632,570: Sport timer used for interval training.

CA 2169969 A: Remote controlled signal cone for sports training with light and audible alarm activated by wireless remote control.

DE 2409045 A: Compact portable traffic-hazard warning indicator -
comprising battery operated light-emitting cone of transparent material for
universal use

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection
presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**.
See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as
set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire
THREE MONTHS from the mailing date of this action. In the event a first reply is
filed within TWO MONTHS of the mailing date of this final action and the advisory
action is not mailed until after the end of the THREE-MONTH shortened statutory
period, then the shortened statutory period will expire on the date the advisory
action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be
calculated from the mailing date of the advisory action. In no event, however, will
the statutory period for reply expire later than SIX MONTHS from the date of this
final action.

Any inquiry concerning this communication or earlier communications from
the examiner should be directed to Ross A. Williams whose telephone number is
(571) 272-5911. The examiner can normally be reached on Mon-Fri 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the
examiner's supervisor, Xuan Thai can be reached on (571) 272-4467. The fax

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phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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10/28/05


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